

ABSTRACT OF THE DISCLOSURE

A method comprised of forming a process layer above a wafer, forming an ARC layer above the process layer, determining at least one optical characteristic of the ARC layer, and determining, based upon the determined optical characteristic of the ARC layer, at least one parameter of a stepper exposure process. The present invention is also directed to a system that may be used to perform the methods described herein. In one embodiment, the system is comprised of an optical metrology tool for measuring at least one optical characteristic of an ARC layer formed above a process layer, a controller for determining, based upon data obtained from the optical metrology tool, at least one parameter of a stepper exposure process, and a stepper tool for performing the exposure process comprised of the determined at least one parameter.